

10/019246

JC13 Rec'd PCT/PTO 18 DEC 2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. Of: OKATANI
Filed: December 18, 2001
For: THREE-DIMENSIONAL MODEL FORMING APPARATUS
DOCKET: SHIG CP04MA00TA

BOX PATENT APPLICATION
Assistant Commissioner of Patents and Trademarks
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Dear Sir:

Applicant respectfully requests that the following amendments be made to the above-identified application prior to examination.

IN THE CLAIMS:

Please amend claim 3, to read as follows:

3. (Amended) A three-dimensional model forming apparatus according to claim 1, wherein the processing for calculating the positions of the camera when the respective images are acquired from the plurality of images and the attitude information that have been acquired comprises the steps of:

projecting the images of the contours of other image onto the respective images using the attitude information of the camera;

calculating lines one ends of which start from the center of projection of the other image on the respective images and which come into contact with the contours;

recalculating the positions of the camera so that the lines, which come into contact with the respective contours, are made equal to each other; and

calculating the positions by repeating these steps until they are converged.

HAYES, SOLOWAY,
HENNESSEY, GROSSMAN
& HAGE, P.C.
P.O. BOX 3042
130 W. CUSHING ST.
TUCSON, AZ 85702-3042

TEL. 520.882.7623
FAX. 520.882.7643

Please add new claim 4, reading as follows:

--4. A three-dimensional model forming apparatus according to claim 2, wherein the processing for calculating the positions of the camera when the respective images are acquired from the plurality of images and the attitude information that have been acquired comprises the steps of:

projecting the images of the contours of other image onto the respective images using the attitude information of the camera;

calculating lines one ends of which start from the center of projection of the other image on the respective images and which come into contact with the contours;

recalculating the positions of the camera so that the lines, which come into contact with the respective contours, are made equal to each other; and

calculating the positions by repeating these steps until they are converged.--


REMARKS

Claim 3 has been amended to eliminate multiple dependency and new claim 4 has been added to further scope the invention. No new matter is believed entered by any of the foregoing amendments. In accordance with 37 CFR 1.121, attached hereto is a marked-up version of the changes made to the claims by the current amendment.

The filing fees have been calculated based on the claims as amended. In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account No. 08-1391.

HAYES, SOLOWAY,
HENNESSEY, GROSSMAN
& HAGE, P.C.
P.O. BOX 3042
130 W. CUSHING ST.
TUCSON, AZ 85702-3042
TEL. 520.882.7623
FAX. 520.882.7643

Respectfully submitted,


Norman P. Soloway
Attorney for Applicants
Reg. No. 24,315

CERTIFICATE OF EXPRESS MAILING

"Express Mail" Mailing Label No. ET956803816US

Date of Deposit December 18, 2001

I hereby certify that this paper and the papers listed thereon are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Box Patent Application, Assistant Commissioner of Patents and Trademarks, P.O. BOX 2327, Arlington, VA 22202.

Signature of Person Mailing Sharon McKniff

Name of Person Mailing Sharon McKniff

HAYES, SOLOWAY,
HENNESSEY, GROSSMAN
& HAGE, P.C.
P.O. BOX 3042
130 W. CUSHING ST
TUCSON, AZ 85702-3042

TEL. 520.882.7623
FAX. 520.882.7643

MARKED COPY OF AMENDED CLAIM

DOCKET: SHIG CP04MA00TA

MARKED CLAIM SHOWING CHANGES MADE:

3. (Amended) A three-dimensional model forming apparatus according to claim 1 [or 2], wherein the processing for calculating the positions of the camera when the respective images are acquired from the plurality of images and the attitude information that have been acquired comprises the steps of:

projecting the images of the contours of other image onto the respective images using the attitude information of the camera;

calculating lines one ends of which start from the center of projection of the other image on the respective images and which come into contact with the contours;

recalculating the positions of the camera so that the lines, which come into contact with the respective contours, are made equal to each other; and

calculating the positions by repeating these steps until they are converged.

HAYES, SOLOWAY,
HENNESSEY, GROSSMAN
& HAGE, P.C.
P.O. BOX 3042
130 W. CUSHING ST
TUCSON, AZ 85702-3042

TEL. 520.882.7623
FAX. 520.882.7643